

## IMPORTANT HEALTH INFORMATION



September 20, 2012

Dear Oak View Elementary Community,

We have had an increase in students presenting with signs and symptoms of severe viral illness. As a precautionary response, we want to inform parents and guardians of measures to take at home in response to this letter. As part of this, we have consulted with the Williamson County Health Department. They have asked us to emphasize the importance of taking your children to their doctor if they show signs of illness, including but not limited to severe headache, fever, nausea, and vomiting.

We also want to let you know what we are doing at school to minimize the risk of spread of illness with our students and staff.

1. We are strictly following the Williamson County Illness Policy that is found on our WCS website – [www.wcs.edu  
http://www.wcs.edu/studentsupportsvc/health\\_services/forms/2011%20Information/Health\\_Services\\_Homepage/Illness20Policy.pdf](http://www.wcs.edu/studentsupportsvc/health_services/forms/2011%20Information/Health_Services_Homepage/Illness20Policy.pdf)
2. We are following CDC preventative measures for assessing students who may appear ill in the school setting and need to be excluded from the school setting. We are referring parents/guardians of students presenting with signs and symptoms of severe illness to their health care provider.
3. We are using exposure control plan disinfection procedures to clean our school building and commonly touched surface areas in our school building.
4. We are implementing infection control measures in our school with our students and staff as we would do with any known respiratory or gastrointestinal illness outbreak.
5. Please contact our administrative staff and/or school nurse if you have specific questions about illness, or signs/symptoms of illness with your individual child.

As always, Oak View Elementary puts the health and safety of our students first. Please let me know if you have any questions or concerns.

Thank you.

Sincerely,

Kate Donnelly  
Acting Principal

## IMPORTANT HEALTH INFORMATION



Tuesday, September 25, 2012

Dear Oak View Parents,

This letter is a follow up to my Friday letter concerning an increased number of students showing symptoms of severe viral illnesses. As confirmed by some Oak View parents, several students have developed viral meningitis and some have required hospitalization. It is so important that you recognize the symptoms for this infection and consult your child's physician at early onset of the symptoms.

The health department does not recognize viral meningitis as a reportable communicable disease. In other words, there is not a community protocol that schools are required to follow when these cases are reported.

However, over the weekend, cleaning crews thoroughly disinfected our school. In addition, we have added cleaning staff that are using exposure control disinfection procedures to clean our building and commonly touched surface areas.

In addition:

- We are strictly following the Williamson County Illness policy found on our website:  
[http://www.wcs.edu/studentsupportsvc/health\\_services/forms/2011%20Information/Health\\_Services\\_Homepage/Illness20Policy.pdf](http://www.wcs.edu/studentsupportsvc/health_services/forms/2011%20Information/Health_Services_Homepage/Illness20Policy.pdf)
- We are following Centers for Disease Control, CDC, preventative measures for assessing students who may appear ill and need to be excluded from the school setting. We are asking parents/guardians of students presenting with signs and symptoms of severe illness to consult their health care provider.
- We are implementing infection control measures in our school with our students and staff as we would do with any known respiratory or gastrointestinal illness outbreak.
- We encourage you to contact our administrative staff and/or school nurse if you have specific questions about illness or signs/symptoms of illness with your individual child.

As always, Oak View puts the health and safety of our students first. Included you will find additional information about viral and bacterial meningitis as provided by the CDC. Please let me know if you have any questions or concerns.

Sincerely,

Kate Donnelly

Acting Principal

# Meningitis Information from Centers for Disease Control and Prevention:

<http://www.cdc.gov/meningitis/viral.html>

<http://www.cdc.gov/meningitis/bacterial.html>

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## Meningitis

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Meningitis is a disease caused by the inflammation of the protective membranes covering the brain and spinal cord known as the meninges. The inflammation is usually caused by an infection of the fluid surrounding the brain and spinal cord.

Meningitis may develop in response to a number of causes, usually bacteria or viruses, but meningitis can also be caused by physical injury, cancer or certain drugs.

The severity of illness and the treatment for meningitis differ depending on the cause. Thus, it is important to know the specific cause of meningitis.

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## Viral Meningitis

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Viral meningitis is generally less severe and resolves without specific treatment.

### Causes

Most viral meningitis cases in the United States, especially during the summer months, are caused by enteroviruses; however, only a small number of people with enterovirus infections actually develop meningitis.

Other viral infections that can lead to meningitis include

- Mumps
- Herpesvirus, including Epstein-Barr virus, herpes simplex viruses, varicella-zoster virus (which also causes chicken pox and shingles), measles, and influenza
- Viruses spread through mosquitoes and other insects (arboviruses)
- In rare cases LCMV (lymphocytic choriomeningitis virus), which is spread by rodents, can cause viral meningitis

### Risk Factors

Viral meningitis can affect anyone. But infants younger than 1 month old and people whose immune systems are weak are at higher risk for severe infection. People who are around someone with viral meningitis have a chance of becoming infected with the virus that made that person sick, but they are not likely to develop meningitis as a complication of the illness.

Factors that can increase your risk of viral meningitis include:

- Age
  - Viral meningitis occurs mostly in children younger than age 5.
- Weakened immune system.
  - There are certain diseases, medications and surgical procedures that may weaken the immune system and increase risk of meningitis.

## Transmission

Enteroviruses, the most common cause of viral meningitis, are most often spread from person to person through fecal contamination (which can occur when changing a diaper or using the toilet and not properly washing hands afterwards). Enteroviruses can also be spread through respiratory secretions (saliva, sputum, or nasal mucus) of an infected person. Other viruses, such as mumps and varicella-zoster virus, may also be spread through direct or indirect contact with saliva, sputum, or mucus of an infected person. Contact with an infected person may increase your chance of becoming infected with the virus that made them sick; however you will have a small chance of developing meningitis as a complication of the illness.

## Signs & Symptoms

Meningitis infection is characterized by a sudden onset of fever, headache, and stiff neck. It is often accompanied by other symptoms, such as

- Nausea
- Vomiting
- Photophobia (sensitivity to light)
- Altered mental status

Viral meningitis is an infection of the meninges (the covering of the brain and spinal cord) that is caused by a virus. Enteroviruses, the most common cause of viral meningitis, appear most often during the summer and fall in temperate climates.

Viral meningitis can affect babies, children, and adults. It is usually less severe than bacterial meningitis and normally clears up without specific treatment. The symptoms of viral meningitis are similar to those for bacterial meningitis, which can be fatal. Because of this, it is important to see a healthcare provider right away if you think you or your child might have meningitis.

Symptoms of viral meningitis in adults may differ from those in children:

### Common symptoms in infants

- Fever
- Irritability
- Poor eating
- Hard to awaken

### Common symptoms in adults

- High fever
- Severe headache
- Stiff neck
- Sensitivity to bright light
- Sleepiness or trouble waking up
- Nausea, vomiting
- Lack of appetite

The symptoms of viral meningitis usually last from 7 to 10 days, and people with normal immune systems usually recover completely.

## Diagnosis

If meningitis is suspected, samples of blood or cerebrospinal fluid (near the spinal cord) are collected and sent to the laboratory for testing. It is important to know the specific cause of meningitis because the severity of illness and the treatment will differ depending on the cause.

The specific causes of meningitis may be determined by tests used to identify the virus in samples collected from the patient.

### Treatment

There is no specific treatment for viral meningitis. Antibiotics do not help viral infections, so they are not useful in the treatment of viral meningitis. Most patients completely recover on their own within 7 to 10 days. A hospital stay may be necessary in more severe cases or for people with weak immune systems.

### Prevention

People with certain viral infections can sometimes develop meningitis. There are no vaccines for the most common causes of viral meningitis. Thus, the best way to prevent it is to prevent viral infections. However, that can be difficult since sometimes people can be infected with a virus and spread the virus even though they do not appear sick. Following are some steps you can take to help lower your chances of becoming infected with viruses or of passing one on to someone else:

- Wash your hands thoroughly and often, especially after changing diapers, using the toilet, or coughing or blowing your nose.
- Clean contaminated surfaces, such as doorknobs or the TV remote control, with soap and water and then disinfect them with a dilute solution of chlorine-containing bleach.
- Avoid kissing or sharing a drinking glass, eating utensil, lipstick, or other such items with sick people or with others when you are sick.
- Make sure you and your child are vaccinated. Vaccinations included in the childhood vaccination schedule can protect children against some diseases that can lead to viral meningitis. These include vaccines against measles and mumps (MMR vaccine) and chickenpox (varicella-zoster vaccine).
- Avoid bites from mosquitoes and other insects that carry diseases that can infect humans.
- Control mice and rats. If you have a rodent infestation in and/or around your home, follow the cleaning and control precautions listed on CDC's website about LCMV (Lymphocytic choriomeningitis virus).

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## Bacterial Meningitis

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Bacterial meningitis is usually severe. While most people with bacterial meningitis recover, it can cause serious complications, such as brain damage, hearing loss, or learning disabilities.

There are several pathogens (types of germs) that can cause bacterial meningitis. Some of the leading causes of bacterial meningitis in the United States include *Haemophilus influenzae* (most often caused by type b, Hib), *Streptococcus pneumoniae*, group B *Streptococcus*, *Listeria monocytogenes*, and *Neisseria meningitidis*.

### Causes

Common causes of bacterial meningitis vary by age group:

Age Group	Causes
Newborns	Group B <i>Streptococcus</i> , <i>Escherichia coli</i> , <i>Listeria monocytogenes</i>
Infants and Children	<i>Streptococcus pneumoniae</i> , <i>Neisseria meningitidis</i> , <i>Haemophilus influenzae</i> type b
Adolescents and Young Adults	<i>Neisseria meningitidis</i> , <i>Streptococcus pneumoniae</i>
Older Adults	<i>Streptococcus pneumoniae</i> , <i>Neisseria meningitidis</i> , <i>Listeria monocytogenes</i>

### Risk Factors

Factors that can **increase** your risk of bacterial meningitis include:

- Age
  - Infants are at higher risk for bacterial meningitis than people in other age groups. However, people of any age are at risk. See the table above for which pathogens more commonly affect which age groups.
- Community setting
  - Infectious diseases tend to spread more quickly where larger groups of people gather together. College students living in dormitories and military personnel are at increased risk for meningococcal meningitis.
- Certain medical conditions
  - There are certain diseases, medications, and surgical procedures that may weaken the immune system or increase risk of meningitis in other ways.
- Working with meningitis-causing pathogens
  - Microbiologists who are routinely exposed to meningitis-causing pathogens are at increased risk.
- Travel
  - Travelers to the meningitis belt in sub-Saharan Africa may be at risk for meningococcal meningitis, particularly during the dry season. Also at risk for meningococcal meningitis are travelers to Mecca during the annual Hajj and Umrah pilgrimage.
- Transmission
  - The germs that cause bacterial meningitis can be contagious. Some bacteria can spread through the exchange of respiratory and throat secretions (e.g., kissing). **Fortunately, most of the bacteria that cause meningitis are not as contagious as diseases like the common cold or the flu.** Also, the bacteria are not spread by casual contact or by simply breathing the air where a person with meningitis has been. Other meningitis-causing bacteria are not spread person-to-person, but can cause disease because the person has certain risk factors (such as a weak immune system or head trauma). Unlike other bacterial causes of meningitis, you can get *Listeria monocytogenes* by eating contaminated food.
  - Sometimes the bacteria that cause meningitis spread to other people. This usually happens when there is close or long contact with a sick person in the same household or daycare center, or if they had direct contact with a patient's oral secretions (such as a boyfriend or girlfriend). People who qualify as close contacts of a person with meningococcal or *Haemophilus influenzae* type b (Hib) meningitis are at higher risk of getting disease and may need antibiotics (see Prevention). Close contacts of a person with meningitis caused by other bacteria, such as *Streptococcus pneumoniae*, do not need antibiotics. **Tell your doctor if you think you have been exposed to someone with meningitis.**
  - Healthy people can carry the bacteria in their nose or throat without getting sick. Rarely, these bacteria can invade the body and cause disease. Most people who 'carry' the bacteria never become sick.

### Pregnancy

Pregnant women are at increased risk of developing listeriosis (caused by the bacterium *Listeria monocytogenes*).

Pregnant women typically experience only a mild, flu-like illness with *Listeria* infection. However, infections during pregnancy can lead to miscarriage, stillbirth, premature delivery, or life-threatening infection of the newborn, including meningitis.

Pregnant women who test positive for group B *Streptococcus* (group B strep) can pass the bacteria to their baby, most often during labor and birth. A newborn infected with group B strep bacteria can develop meningitis or other life-threatening infections soon after birth.

You can reduce your risk of meningitis caused by *Listeria monocytogenes* by learning what foods to avoid and how to safely prepare and refrigerate food. If you are pregnant, you should get screened for group B strep at 35-37 weeks. Women who test positive for group B strep will be given antibiotics during labor to prevent infection in a newborn.

Talk to your doctor to learn more about how to prevent these infections.

## SIGNS and SYMPTOMS

Meningitis infection may show up in a person by a sudden onset of fever, headache, and stiff neck. It will often have other symptoms, such as

- Nausea
- Vomiting
- Increased sensitivity to light (photophobia)
- Altered mental status (confusion)

The symptoms of bacterial meningitis can appear quickly or over several days. Typically they develop within 3-7 days after exposure.

Babies younger than one month old are at a higher risk for severe infections, like meningitis, than older children. In newborns and infants, the classic symptoms of fever, headache, and neck stiffness may be absent or difficult to notice. The infant may appear to be slow or inactive (lack of alertness), irritable, vomiting or feeding poorly. In young infants, doctors may look for a bulging fontanelle (soft spot on infant's head) or abnormal reflexes, which can also be signs of meningitis. If you think your infant has any of these symptoms, call the doctor or clinic right away.

Later symptoms of bacterial meningitis can be very severe (e.g., seizures, coma). For this reason, **anyone who thinks they may have meningitis should see a doctor as soon as possible.**

## Diagnosis

If meningitis is suspected, samples of blood or cerebrospinal fluid (near the spinal cord) are collected and sent to the laboratory for testing. It is important to know the specific cause of meningitis because that helps doctors understand how to treat the disease, and possibly how bad it will get. In the case of bacterial meningitis, antibiotics can help prevent severe illness and reduce the spread of infection from person to person.

If bacteria are present, they can often be grown (cultured). Growing the bacteria in the laboratory is important for confirming the presence of bacteria, identifying the specific type of bacteria that is causing the infection, and deciding which antibiotic will work best. Other tests can sometimes find and identify the bacteria if the cultures do not.

## Treatment

Bacterial meningitis can be treated effectively with antibiotics. **It is important that treatment be started as soon as possible.** Appropriate antibiotic treatment of the most common types of bacterial meningitis should reduce the risk of dying from meningitis to below 15%, although the risk remains higher among young infants and the elderly.

## Prevention

The most effective way to protect you and your child against certain types of bacterial meningitis is to **complete the recommended vaccine schedule.** There are vaccines for three types of bacteria that can cause meningitis: *Neisseria meningitidis* (meningococcus), *Streptococcus pneumoniae* (pneumococcus), and *Haemophilus influenzae* type b (Hib). Antibiotics may be recommended for close contacts of people with meningococcal meningitis. Antibiotics may also be recommended for the entire family if a family member develops severe Hib infection and there's a high risk person in the house. This is to decrease the risk of spreading disease to a high risk person, since they are at increased risk for severe disease. Your doctor or local health department will tell you if there's a high risk person in your house and antibiotics are needed.

Maintaining healthy habits, like not smoking and avoiding cigarette smoke, getting plenty of rest, and not coming into close contact with people who are sick, can also help. This is especially important for young infants, the elderly, or for those with a weakened immune system, since they are at increased risk for severe disease.